DEPARTMENT OF AGRICULTURAL SCIENCES

ENSC 101 GENERAL ENVIRONMENTAL SCIENCE I FALL 2009

THIS IS A GENERAL EDUCATION COURSE and IT IS WRITING ENRICHED

Text: R.K. Kaufmann & C.J. Cleveland, 2008, *Environmental Science*. The text is available in the McNeese Bookstore

COURSE GOALS and OBJECTIVES

The university's 2009-2010 *Course Catalog* describes **ENSC 101** as introducing "Principles and concepts of environmental science with emphasis on **basic ecology**, **natural communities**, **human populations**, **and resource conservation**, **agriculture**, **risk**, **and toxicology**"

These seven broad topics [**bolded above**,] are intimately related among themselves. **Start early** in this course to **look for**, and **think of** these topics as **parts** of a **complex system rather than stand-alone topics**.

I have structured the introductory-level lectures to

- Explain and describe The Scientific Method, and how/why we use it,
- Introduce/familiarize class members with several of the fundamental principles and ideas associated with the conduct of and an intellectual appreciation of the interdisciplinary [biological/chemical/physical/social interactions and needs of this field of study,
- Include historic and/or current <u>examples/case studies</u> that will assist you to better understand some of the basic complexities facing both decision makers and *informed citizens* (=you),
- Emphasize larger scale (="broader brush") processes and systems to illustrate the <u>complex and often subtle</u> interactions among the major environmental components.
- Supplement the course text and lectures with **assigned external readings** (primarily electronic format) from classic and current contributions to the **technical** and **popular** (newspapers, magazines, *etc.*) literature,
- Incorporate germane local/regional environmental issues into the lecture and discussion materials.
- Provide opportunities for you to develop and hone <u>vour writing skills</u> via portions of the three hourly examinations, and

 Foster critical thinking in appreciating and weighting different opinions/approaches/values, especially on controversial issues.

Student Learning Outcomes

At the completion of your <u>undergraduate</u> **program**, *i.e.*, <u>your</u> B.S. degree, MSU graduates will be able to:

- apply critical thinking in academic and professional environments,
- formulate and express ideas effectively through oral, written, and/or technical communications in academic and professional environments, and
- analyze the global community to make sound judgments in academic and professional environments.

At the successful completion of this **course**, you will be able to:

- **recognize and explain** the major, inter/multidisciplinary elements that affect our environmental media, public **and** environmental "health", and sustainability,
- **demonstrate and analyze** a few of the quantitative impacts of **your** "ecological/environmental footprint", and
- **examine/articulate** some of the popular press (written/electronic) treatments *re* current environmental issues (*i.e.*, climate change, energy concerns, *etc.*).

The course SLOs will be <u>assessed</u> by embedded test questions within the quizzes and/or hourly tests, written "findings"/descriptions of your "footprint" exercises (2), as well as your understanding of the "<u>Scientific Method</u>" *per* the **Louisiana Board of Regents** requirement (# 5, specifically).

ATTENDANCE

I expect you to attend and participate appropriately in <u>all</u> scheduled class meetings. In the lectures/discussions, I do **not** emphasize equally all of the required reading material (both text **and** external articles). **As a rule, the more classes you miss, the** *poorer your performance [your grade] will be!* When you miss a lecture, you are accountable for the material covered.

I do not grant "WN" grades.

You may access the <u>university's *Class Attendance Regulations* policy</u> under http://www.mcneese.edu/policy/attendance/htm

I use a combination of sign-in sheets, tests/quizzes and Scantrons (multiple choice answer sheets, version **FORM No. 882-E** [to be specific]) to document your attendance throughout the entire semester. If you falsify any attendance vehicle, you and your cohort(s) **will receive a failing grade for the course**. If the attendance sign-in sheet is the only record for a class meeting, and, if you fail to initial it, you will be noted/recorded as having been absent for that session.

I believe strongly in the **Socratic approach** in teaching. Within a few weeks of the start of the semester, I plan to associate names and faces to enable more **one-on-one oral exchanges.**

TESTING

During the Fall Semester you will have **weekly quizzes** (5), **three** examinations (= tests, "hourlies") which includes the **final** (end-of-semester) examination. The dates for these **assessments** of your comprehension/progress are

Quizzes; 27 Aug Hourly Exam; #1, 17 Sep

10 Sep #2, 22 Oct

1 Oct

15 Oct Final Exam; 7 Dec, 0800-1000

12 Nov

The **quizzes** will be entirely multiple-choice (Scantron answer cards). The quiz will be given **during the first ten minutes** of the lecture session. If you arrive late, *i.e.*, after the quiz has begun, you will have whatever time remains from the start of the quiz.

The maximum number of "points" you can achieve on all of the quizzes is 100 (four quizzes @ 25 points each). If you turn in fewer than four completed quiz Scantrons during the semester, your maximum achievable points will be the number of quizzes turned in x 25. If you know that you will not be able to take a scheduled quiz, arrange with me to take it *early*. I do <u>not</u> offer make up quizzes. If you leave [unexcused] the class after turning in your completed quiz Scantron, I will **not** grade that quiz, *i.e.*, you will receive a zero for that quiz.

The three "Hourly Examinations" will be mixed format, i.e.,

- ~ 60% will be multiple choice,
- ~20% will be short written answers/ and/or labeled and explained diagrams,
 and
- the remainder will be written, subjective, longer answer (=discussion or essay question(s)).

The first two examinations will run for one hour. The final exam format will be similar to the hourly versions. However, two hours are scheduled by the university. *Per* the university practice, the final examination will be comprehensive.

I do <u>not</u> offer "extra credit" work. If you do not perform well in the regular testing vehicles, you will do better to study more efficiently/effectively rather than request additional work.

MISSED EXAMS

If you have an acceptable, valid, written excuse for missing a scheduled EXAM, you may take a make-up examination on Tues 1 Dec. The student must request this consideration within two days following his/her return to classes [any class, not just this class]. Class Attendance Regulations, item #4 states "If a student misses an examination, it is the student's responsibility to present an excuse to the instructor within the time frame specified by the instructor and to arrange a

date and place of examination." [From *University Policies* cited at http://www.mcneese.edu/policy/attendance/php]

Make up exams will be <u>entirely discussion</u> (routinely three or four high-point value essays). If you must miss an exam because of some earlier scheduled activity, *i.e.*, you know of the conflict in advance of the exam, **arrange with me AHEAD OF TIME** to take the "regular" exam **before** the normally scheduled exam time.

The last day to withdraw from a class for the 09 Fall Semester is Thursday 29 Oct.

Any student with a disability is encouraged to contact the **Office of Services for Students with Disabilities** in **Drew Hall, Room 200, voice (337) 475-5916; hearing impaired (337) 475-5722.** It is each student's responsibility to register with the Office of Services for Students with Disabilities when requesting a reasonable accommodation. A student with a disability is responsible for locating the designated emergency exits and the areas of refuge in a classroom building. The student is encouraged to develop an evacuation plan and discuss the plan with the faculty member.

Students should visit the MSU web page at http://www.mcneese.edu/policy/diversity.htm for information about diversity awareness and sexual harassment policies and procedures.

GRADING

Your total possible points for the semester are **400**. The distribution of the different assessments is

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Biweekly quizzes = 100 points, (4 @ 25 points each),
Hourly exams = 200 points, (2 @ 100 points each), and
Final exam = 100 points.
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Your semester grade will be based on your percentage earned from all possible

points.	A = 90% or better	(360/400)
•	B = 80-89%	(320-359)
	C = 70-79%	(280-319)***
	D = 60-69%	(240-279)
	F = <60%	(<240)

^{***}You must achieve a "C" for this class to have the course count as part of your curriculum core requirement, if you are an ENSC major.

An incomplete ("I") semester grade may be awarded for work that *is passing* but is not complete. The incomplete nature results from circumstances beyond the student's control. You must request the "I" from me; I may not give this unilaterally. You are responsible for removing the "I" by arranging with me to complete the missing work within a reasonable, mutually agreed upon time period following the semester in which you were granted an "I". If you do not complete the missing material within the allotted time, you will automatically receive a grade of "F" per university policy.

I will work diligently to provide your grades in a timely manner. I cannot provide grades during a phone conversation, nor am I permitted to provide grades *via* email. If you have questions regarding a grade, arrange to meet with me during my office hours. I will not confer with you immediately following the return of the quiz/test, nor immediately at the close of the class. I've found that a private meeting is more profitable to resolve differences/misunderstandings rather than trying to do so within a group.

ACADEMIC DISHONESTY

You will receive a "0" (=zero points) for cheating on or during **any assessment** of your performance in this class. I will pass the specific information to the appropriate Dean(s) and Registrar. I may assign your semester grade as "F".

The university's **Academic Integrity Policy** applies to all aspects of this class. **Read/review** the policy at http://www.mcneese.edu/integrity. Note that the policy includes plagiarism in any form. You may (and probably need to) include existing information [that produced by someone else] into research papers; this is perfectly valid as long as you include the appropriate, **full and valid citation** for the work that you cite.

CLASS ETIQUETTE/CIVILITY

- Beverages and food are NOT permitted in the classroom.
- If you email me, use your MSU account; I will not open messages from external providers,
- If you must carry a pager or phone, set it to the vibrate mode
 <u>before</u> the class meeting (lectures, and quiz/test events). If you
 expect to receive an emergency message, notify me before the
 lecture begins; you should sit close to an exit in case you need to
 respond quickly.
- If you must leave a class session early because of a scheduled event, notify me before the lecture begins; sit close to an exit.
- **BE ON TIME**. If you arrive after the lecture/test/quiz has begun, minimize your disturbing the group. Enter and situate yourself quietly.
- After you initial the attendance sign-in sheet, please pass it quickly to the next student. If you're holding the sheet at the close of the class period, please hand it to me as you leave.

FALL 2009 CURRICULUM SEQUENCE - ENSC 101

The *Kaufmann & Cleveland* text is very good as an introductory *summary*. It is not encyclopedic but it provides a lot of specific information bits (= data)! Do not be overwhelmed by the amount of information. You will need to learn a fair amount of information in order to do well in this course, but I do not expect you to memorize each datum! Rather than trying to memorize hundreds/thousands of seemingly unrelated facts, concentrate on learning/appreciating some of the driving principles and/or processes that integrate the individual "facts". Sometimes the *Order of Magnitude* approach is adequate for this level of learning. In this class, "why/why not/how…" are almost always good questions to pursue in this type of discipline.

I use the text as a *guide*. It is <u>not</u> the sole source of information that I use to familiarize you with some major aspects of this curriculum. Environmental Science is <u>not</u> a pure or primary science. It incorporates a broad variety of information from many disciplines (both technical and social) in its approach to understanding and explaining both natural and man-influenced processes in the biological-chemical-physical-social world. For this reason, we will incorporate a few fundamentals from the contributory, supporting disciplines. SO – don't panic when we begin talking about atomic theory or the Laws of Thermodynamics!

If you haven't already learned this trick, begin to use the *Glossary* (p.524 and following) to recognize and appreciate this **CRITICAL PART** of your text. Use the glossary any time that you're not certain of the **meaning/use** of a word in the text or that I use during the lecture and discussions.

Think of **Environmental Science** as a **new language** – you'll need to learn many new terms and ideas to become proficient. **Do <u>not</u> assume** that you know how to speak the language – we use a lot of dialects, jargon and peculiarities that we've created, borrowed and/or stolen from several specialized disciplines.

For the first semester, I concentrate on **the subject matter** included within **Chapters 1 through 12, 15-17.** This is a lot of material! I will import bits and pieces of other chapters' materials when these may help to better understand a specific topic.

Although I will not cover all of the information within any chapter evenly, I will follow the text chapter sequence provided above. I recommend that you mark/highlight your text as to those topics that I emphasize during the lectures/classroom discussions. This allows you to better remember what we emphasized, especially when reviewing for the hourly examinations.

I do not lecture [i.e., <u>read from</u>] from the text's materials. If you rely solely on the text for your grade, you'll probably not do very well grade-wise! You <u>need to learn how to take notes from the lecture during real time</u>. I do <u>not</u> provide "study quides".

You must assume that I expect you to **read** (and **reread if necessary for comprehension**) **all** of the material in the chapters that we cover, **and** the outside material that I assign (see next section) as well. Keep in mind that I will NOT cover/treat all of the text's information equally. When appropriate, I will update or supplement the text with more current information from the technical/popular literature. Typically I will not provide the full citation for the outside information source. If you're particularly interested in certain material(s), let me know outside of the lecture and I'll give you the article or source information. Be certain to use the **end-of-chapter study helps**, as well as the *Learning Online* capabilities offered by the publisher.

We all learn differently. As a commonality though, to do well in this class <u>you</u> will need to;

read the text and assigned outside (primarily Blackboard) materials, **listen** to the lecture materials,

LEARN HOW TO TAKE MEANINGFUL AND UNDERSTANDABLE (TO YOU!!!!!) NOTES.

participate in class discussions, and **ask** questions.

ELECTRONIC INFORMATION - FRAZAR MEMORIAL LIBRARY/Blackboard

Throughout the semester I will place "copies" of short articles/news items to supplement the lecture material on *Blackboard*. This will enable you to access the information from any computer having Internet access whenever you choose to do so. I will post a variety of information on *Blackboard*, so be certain to review it <u>regularly</u>. I may not always remember to alert you that I've posted new materials for the class.

I've managed this class's *Blackboard* site so that you may **self-register**; you **must obtain** a Blackboard account.

I may not emphasize or even discuss the external readings during lecture. The information, as with all assigned readings, is testable, however. Be aware that any/all discussion materials are also testable. Sometimes, open discussion arising from a question/comment offered in class provides excellent learning material.

A Word of Advice -

This is a generic pitch – applicable to any curriculum and I recommend (**NOT REQUIRED!!!)** it highly.

The following short paperback book contains lots of information that can save you a lot of confusion, time lost/wasted on trying to figure out academic "mysteries", and simply providing very helpful suggestions for life, both in and out of school. It will be especially helpful for less experienced (= folks starting out) students, although even battle-hardened and scarred students may pick up a few useful "truths".

Study Is Hard Work, 2nd edition, 1997, 148 pp. William H. Armstrong. David R. Godine, Publisher, Boston ISBN 1-56792-025-X

And finally - - -

I strongly recommend that you join or establish a small **STUDY GROUP** of fellow students in this class and **meet regularly.** A few minds, especially in an introductory technical class, will generally be better than one when rehashing what each person heard/thought that they heard in the lecture, or culled from the readings. You may feel that group study is "high-schoolish" or demeaning of your abilities. It may be, particularly if you're a real "Lone Ranger" and have well-developed study skills. **You will be exposed to a lot of information during lectures and discussions!** You may find that an additional pair of ears will be helpful on occasion. Also, realize that you'll always have lots of reading material to cover as well.

Don't wait until two evenings before an hourly exam to figure out what it is that you think you're doing. **Do not over-discount the quizzes either.** If you do poorly on

/miss a quiz during the semester, you most likely will not earn a decent grade for the semester. A panicky, 15-minute glance over the material immediately before the quiz will most likely produce an *unsatisfactory* grade.

I have lots of office hours. Ask questions often and early! Normally, the only really stupid question is the one that you wish you had asked before reading the test/quiz question.

UNIVERSITY DIVERSITY AWARENESS AND SEXUAL HARASSMENT POLICIES

You should visit and read the university's home page http://www.mcneese.edu/policy/diversity.htm for information about the university's policies and procedures regarding these important topics'.

The respective policies and associated procedures are presented there.

A "score" sheet follows. I recommend that you enter your earned grades on it to enable you to have an accurate, running summary of how you're progressing in the class performance assessments

.ENSC 101 A Fall 2009/ fxp

GRADE RECORD ENSC 101 A FALL 2009

QUIZ NO. DATE GRADE

1 2 3 4					
5	TOTAL		[A]		
HOURLY EXAMINATION NO. 1 2		DATE	GRADE		
			TOTAL		[B]

ADD [A] AND [B] TOGETHER. ABSENT ADDITIONAL POINTS AVAILABLE FROM ADDITIONAL EXERCISES, THE POSSIBLE TOTAL OF THE TWO NUMBERS IS 300. YOU NOW CAN COMPUTE HOW MANY POINTS YOU WILL NEED TO ACHIEVE ON THE THIRD EXAMINATION IN ORDER TO ACHIEVE A PARTICULAR LETTER GRADE FOR THE SEMESTER.

PROVIDED TO STUDENTS DURING THE FIRST WEEK OF CLASS <u>VIA</u> ATTACHMENT TO THE SYLLABUS ON THE COURSE'S BLACKBOARD POSTING. August 2009, FXP